The Correlation Between Black Lower Socio-Economic Areas and High Rates Of HIV/AIDs

Rickerson Geneus

Florida State University

ENC 2135: Research, Genre, and Context

Professor Bridgette Sanders

October 13, 2023

Introduction:

Human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) are diseases that have heavily affected people around the world since it's mainstream recognition in the 1980s. This disease affects all types of people and has ravished many communities ranging from African slums to individuals in upper class United States. It is contracted through genital secretions, blood, and other bodily fluids but sadly has no cure. Once contracted it may be managed through things like Anti-retro viral drug therapy which helps limit the extent of HIV. Once an individual's white blood cell count (specifically the CD4+ count) reaches lower than a certain number, a person is considered to have contracted acquired immunodeficiency syndrome (AIDS) in which a person is extremely susceptible to most pathogens, which includes pathogens that a person with a normal immune system can fend off easily. HIV is known to be most prevalent in lower socioeconomic status (SES) areas and much scarcer in higher SES areas. Lower SES areas are communities that usually have low household income (median income of around $30,000 per household), low education rates, and other attributes known to follow neighborhoods that are commonly called the "ghetto". Higher socioeconomic areas are communities that have a stark contrast to lower SES areas including high income, high education, and very safe and well-managed neighborhoods. A common misconception of lower SES areas is that high HIV/AIDs rates in these communities are simply due to the lack of education, but I seek to show that many factors - like lack of access to healthcare, drug use, lack of contraceptive use/access, sharing needles, and increased stress - cause HIV to be so prominent in lower SES Black communities.

Methods:

The research done in this paper was performed through a literature review involving six sources, four of which are peer-reviewed and the other two being website articles from reputable sources. The first peer reviewed source is an article that deep dives into how lower SES communities are affected more by HIV, the health disparities that cause it, and social positions that are affected by it. All of these facts play into how one in a lower SES community may contract HIV, spread it around in the community, and which demographic may be most likely to be involved with HIV. The second source focused on the discrimination and HIV test outcome of black woman infected with HIV. This article provides its information by providing the results of 151 black women in Southeast USA with surveys related to the microaggressions, income, education level, HIV test outcome, and other attributes of the woman's lives and neighborhoods. This study was headed by Dr. Ian A. Wright (who researches under the University of Miami) and had his paper and study published under the American Public Health Association. The third peer reviewed article by Dr. An performed a similar study where it oversaw a matching of HIV diagnoses to 2000 US Census data and State registry information. All of the provided data went on to show trends between different groups. The final peer reviewed journal article focused on a study performed at Oregon Health and Sciences University, in which woman were questioned on sexual habits (with a heavy emphasis on transactional sex), drug use, abuse, childhood experiences, and more.

The two other sources followed a different format in which they directly and briefly shared credible information from the likes of the American Psychological Association and the Center of American Progress. One source focuses on how socioeconomic status affects HIV treatment and the how individuals of lower socioeconomic status contract HIV due to the activity

of the area. The other source elaborates and bridges connections between multiple studies to show how HIV profoundly affects lower SES communities.

Results and Discussion:

The article from Dr. An's peer reviewed article provided evidence that African American men and women have the highest rates of HIV after a study comparing 2000 US Census data to reported HIV cases from 37 states was done. His article stated, "The overall HIV diagnosis rates were 4.16 (95%CI = 3.98, 4.34) times as high among Black males and 1.76 (95% CI = 1.62, 1.91) times as high among Hispanic males compared with White males" (An, 2013). Later in the academic article, it was stated that the HIV rate was ten times more prevalent in Black women when compared to Hispanic and whites (An, 2013). This info from Dr. An's article provided a basis for a correlation between race and SES as they relate to HIV. Menza's Academic journal provides a similar context, but instead of focusing on race the article researches the experiences of women in the Portland, Oregon area. The article states, "Approximately 14% of women reported transactional sex in the prior 12 months (13.6, 95% CI: 6.8, 20.5%). Women who reported transactional sex were…more likely to report homelessness and incarceration" (Menza, 2020). Women who have performed transactional sex also were more likely to have bad childhood experiences and have been sexually abused in some way. Incarceration, homelessness, sexual abuse, and transactional sex can all lead to HIV or can help lead to HIV. When all the women in the survey were asked if they took PrEP (a drug that helps prevent HIV) only 3.8% of women reported taking it, and most of the individuals who took the drug were individuals who didn't report transactional sex (Menza, 2020). The lack of protection and use of preventative measures combined with many risk factors (like unprotected transactional sex) due to issues like homelessness and poverty leads to a higher possibility of catching HIV.

Many attributes in the environment of a lower SES community all combine to contribute to these communities having high HIV rates that are near epidemic levels seen in many less developed countries. Lower SES communities are commonly found with "Unstable housing, food insecurity, and a lack of consistent access to quality health care [which makes] it very difficult to manage what has increasingly become a manageable disease for those with higher incomes" (Cawthorne, 2010). When considering HIV care, managing the disease can only be done with expensive therapy (which cost $10,000 to $15,000 per year per person). As a result of low incomes being common in low SES areas, this predisposes the members of these communities to healthcare disparity and a higher chance to be diagnosed with AIDS. These attributes of the lower SES areas only scrape the surface of how the environment affects HIV/AIDS rates/care as high crime and violence rates add to the many discrepancies of lower SES communities and degrade the mental health of the area. Altered mental health indicates a lower likelihood of medication adherence, also predisposing individuals with HIV to AIDS.

The peer-reviewed article by Jennifer Pellowski provided detailed results of how one may catch HIV in a lower SES community. The article provided insight into how the disease will be spread through direct contact with infectable cells and that the chances of infection are altered by the degree to which HIV is present in the body. This is evidenced by the fact that people with sexually transmitted infections (STIs) that are active and present during sexual intercourse increase the chance of infection by five times when a genital ulcer is present. This knowledge that STIs and associated ulcers can increase the rate of HIV transmission may be basis for the idea that decreased access to health may be a core factor to HIV being so high in lower SES communities as ulcers and STIs are more prevalent due to a lack of access to healthcare. The article also states more to add to the idea that things besides education truly affect the disease

rates of lower SES citizens. “Poverty, discrimination, inequality and other social conditions facilitate HIV transmission by influencing local HIV prevalence as well as an individual’s risk behaviors. For example, substance use can reduce the likelihood that a person will take protective actions, such as using condoms, and substance use can stimulate HIV replication and therefore increase infectiousness” (Pellowski, 2013). Decreased condom use increases the chances of HIV being spread as more infectable cells are present. Associated drug use can cause an increase in HIV rates by spreading the disease through shared needle use (and aggravated HIV rates due to drug use).

Another article sought to see how black women with HIV suffer through discrimination and how their mental health, HIV test outcomes, and other factors are affected. The study focused on the results of surveys given to 151 black women with HIV. `1` The article stated, “higher crime was associated with higher depressive symptoms (b 5 0.00733; P< .05) and posttraumatic cognitions (b 5 0.0344; P < .01; Tables 3 and 4). Also, higher crime was associated with higher likelihood of diagnoses of PTSD (b 5 0.00131; P < .01) and substance use disorder (b 5 0.00126; P < .01)” (Wright, 2022). In lower SES communities, the stress from the surrounding environment (due to things like high crime rates and increased work hours to make ends meet), and other things all affect the mental health of the community in which these things occur. For individuals with HIV, this means that their mental health may affect their ability to stay consistent with treatment and therapy, which predisposes them to AIDS. This same idea is further propagated by the fact that higher household incomes, more education, higher employment rates were correlated with a bigger chance of HIV being suppressed (Wright, 2022).

Once HIV is diagnosed, individuals may need to take medication or incorporate other forms of therapy to manage their diagnosis and overall health. Without the proper income or

access to healthcare, this may prove to be a difficult challenge. This can be evidenced by the fact that unemployment rates for people with HIV are 45 to 65% (APA, 2022). This high rate can be related to the fact that discrimination/bias from the general public due to HIV is present heavily in many job application processes and workplaces. The discrimination may be based on more than just prejudice as an individual with HIV may need to take more time off of work to keep up with treatments. The article from APA also stated, "Disease severity and self-reported HIV-related work discrimination place HIV-positive women and individuals with low education at risk for employment loss" (APA, 2022). Since individuals in lower SES communities commonly have lower education, the impact of HIV on their livelihoods may be more pronounced and go onto affect their medication adherence and many other aspects of their lives. Lack of medication adherence will allow HIV to progress to AIDS, which is when one's immune system is immensely compromised, and a person is possibly subject to fatality from simple pathogens that most can overcome easily.

Conclusion:

HIV disproportionately affects people of lower SES. Some may continue to think that only a lack of education in lower SES is the only contributing factor, but the data presented may show otherwise. Factors that intertwine with each other like high crime rates, altered mental health, low incomes, lack of access to healthcare, and discrimination all affect HIV rates in one way or another. When looking beyond just the name "African American" and the color of their skin, most can see that the community that many blacks live in (and the lack of infrastructure within those communities) needs change to occur to make lower SES Black communities safer and healthier.

References

American Psychological Association. (2022, April 20). HIV/AIDS and socioeconomic status. *https://www.apa.org*. Retrieved September 25, 2023, from https://www.apa.org/pi/ses/resources/publications/hiv-aids#:~:text=SES%20Affects%20HIV%20Infection,et%20al.%2C%202013

An, Q., Prejean, J., McDavid Harrison, K., & Fang, X. (2013). Association between community socioeconomic position and HIV diagnosis rate among adults and adolescents in the United States, 2005 to 2009. *American journal of public health, 103(1), 120–126.* https://doi.org/10.2105/AJPH.2012.300853

Cawthorne Gaines, A. (2010, July 21). Poverty is driving an HIV epidemic. *Center for American Progress*. https://www.americanprogress.org/article/poverty-is-driving-an-hiv-epidemic/

Menza, T. W., Lipira, L., Bhattarai, A., Leon, V. C., & Orellana, E. R. (2020). Prevalence and correlates of transactional sex among women of low socioeconomic status in Portland, OR. *BMC Women's Health*, *20*(*1*). https://doi.org/10.1186/s12905-020-01088-1

Pellowski, J. A., Kalichman, S. C., Matthews, K. A., & Adler, N. (2013). A pandemic of the poor: Social disadvantage and the U.S. HIV epidemic. *American Psychologist, 68(4), 197–209*. https://doi.org/10.1037/a0032694

Wright, I. A., PhD., Reid, R., M.S., Shahid, N., B.A., Ponce, A., M.P.H., Nelson, C. M., Sanders, J., M.S., Gardner, N., B.S., Liu, J., M.P.H., Simmons, E., B.A., Phillips, A., C.A.C., Pan, Y., PhD., Alcaide, M. L., M.D., Rodriguez, A., M.D., Ironson, Gail,M.D., PhD., Feaster, D. J., PhD., Safren, S. A., PhD., & Dale, S. K., PhD. (2022). Neighborhood Characteristics, Intersectional Discrimination, Mental Health, and HIV Outcomes Among Black Women Living With HIV, Southeastern United States, 2019–2020. *American*

Journal of Public Health, Supplement 4, 112, S433-S443.

https://doi.org/10.2105/AJPH.2021.306675